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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of )  
                        )  
Breaker *et al.*      ) Art Unit: 1635  
                        )  
Application No. 09/780,929 ) Examiner: Schultz, J.  
                        )  
Filing Date: February 8, 2001 ) Confirmation No. 6724  
                        )  
For: NUCLEIC ACID CATALYSTS WITH )  
ENDONUCLEASE ACTIVITY      )

**POWER OF ATTORNEY**  
(Statement Under C.F.R. § 3.73(b))

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

NEEDLE & ROSENBERG, P.C.  
Customer Number 23859

Sir:

Yale University, Assignee, is owner of a joint and undivided interest in the above-identified patent application, as evidenced by the attached copy of an Assignment from Ronald Breaker to Assignee, which Assignment has been recorded with the U.S. Patent and Trademark Office at Reel 011998, Frame 0001 as of July 19, 2001.

As a representative authorized to act on behalf of the Assignee, I hereby revoke any and all previous Powers of Attorney and grant Power of Attorney to the attorneys/agents associated with the following Customer Number:

**Customer No. 23859**

to represent Assignee in connection with all matters pertaining to the above-referenced application, with full power of substitution, association and revocation, to prosecute said application and to transact all business in the U.S. Patent and Trademark Office connected therewith.

Address all telephone calls to Robert A. Hodges, Ph.D., at telephone number (678) 420-9300.

Address all correspondence to the address of record for Customer Number:

Customer No. 23859

YALE UNIVERSITY

Dorothy K. Robinson  
Type Name: \_\_\_\_\_

Date: July 23, 2007

Dorothy K. Robinson  
Vice President and General Counsel  
Yale University



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SEPTEMBER 26, 2001

PTAS

MCDONNELL, BOEHNEN, HULBERT ET AL.  
ANITA J. TERPSTRA  
300 S WACKER DR, STE 3200  
CHICAGO, IL 60606



\*101788308A\*

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NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/19/2001

REEL/FRAME: 011998/0001  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

BREAKER, RONALD

DOC DATE: 06/07/2001

ASSIGNEE:

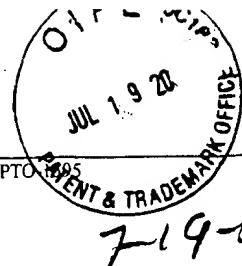
UNIVERSITY, YALE  
451 COLLEGE STREET  
NEW HAVEN, CONNECTICUT 06511

SERIAL NUMBER: 09780929

FILING DATE: 02/08/2001  
ISSUE DATE:

PATENT NUMBER:

ANTIONE ROYALL, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



FORM PTO 1595

719-07

RE

07-26-2001



101788308

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark OfficeAttorney Ref. No. MBHB00-884-H  
(500.001)

To The Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying parties: Ronald Breaker	2. Name and address of receiving party(ies)  Name: Yale University  Internal Address:  _____  _____  Street Address: 451 College Street City: Country: Zip: New Haven, CT 06511
Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance:  <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger  <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name  <input type="checkbox"/> Other _____	Execution Date: June 7, 2001

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

## A. Patent Application No.(s)

09/780,929

## B. Patent No.(s)

Additional numbers attached?  Yes  No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Anita J. Terpstra, Reg. No. 47,132

Company Name: McDonnell, Boehnen, Hulbert &amp; Berghoff

Street Address: 300 South Wacker Drive, Suite 3200

City: Chicago State: IL ZIP: 60606

## 6. Total number of applications and patents involved: 1

7. Total Fee (37 CFR 3.41).....\$40.00

 Enclosed Authorized to be charged to deposit account

## 8. Deposit account number: 13-2490

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## 9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*Anita J. Terpstra, Reg. No. 47,132  
Printed Name of Person Signing

Signature

Date: July 16, 2001

Total number of pages including cover sheet, attachments, and document:

Mail documents to be recorded with required cover sheet information to:

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07/25/2001 AAWME1 00000140 09780929

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**ASSIGNMENT**

Case No.: MBHB00,884-H 500.001  
Inventors: Breaker et al.

Serial No.: 09/780,929  
Filing Date: February 8, 2001

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

**YALE UNIVERSITY  
451 College Street  
New Haven, CT 06511**

its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, entitled:

**NUCLEIC ACID CATALYSTS WITH ENDONUCLEASE ACTIVITY**

and identified as:

**Case No. MBHB00,884-H 500.001**

in the offices of McDONNELL BOEHNEN HULBERT & BERGHOFF and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application to insert in this assignment the filing date and serial number of said application when officially known, and the date of execution of the application.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention or improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned

with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

WITNESS my hand and seal this 7 day of June, 2001.

  
RONALD BREAKER

State of Connecticut

County of New Haven

The foregoing instrument was acknowledged before me this 7<sup>th</sup> day of June, 2001, by

**RONALD BREAKER.**

  
NOTARY PUBLIC

**ALEXIS L. FLINT  
NOTARY PUBLIC  
COMMISSION EXPIRES DEC. 31, 2004**